

### **Remarks**

Applicant has reviewed the Office Action dated as mailed December 18, 2006. After the above amendments have been made, the present application contains claims 1, 2, 4, 7-17, 19-25, 27-31, and 35-40. Claims 1, 4, 16, 17, 19, 21, 23, 24, 30, 36, 38, and 39 have been amended. Claims 3, 5, 6, 18, 26, and 32-34 have been canceled. New claim 40 has been added.

#### **Claim Rejections Under 35 U.S.C. §112**

Claims 1, 16, 23, 30 and 36 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 16, 23 30 and 36 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Additionally, claims 1, 30 and 36 each recite “acquiring another channel from the channel scan list in response to the other channel having an associated quality indicator greater than or equal to the predetermined threshold value.” Applicant respectfully submits that antecedent basis for “the other channel” would be “another channel.” Accordingly, Applicant respectfully submits that claims 1, 16, 23, 30 and 36 satisfy the requirements of 35 U.S.C. §112, and reconsideration and withdrawal of the Section 112 rejection of claims 1, 16, 23, 30 and 36 is respectfully requested.

#### **Claim Rejections Under 35 U.S.C. §103**

Claims 1, 2, 10, 11, 13, 14, 30 and 31 were rejected under 35 U.S.C. 103(a) as being unpatentable over Spear, U.S. patent Number 6,289,220 (hereinafter Spear) and further in view of Dent, U.S. Patent Number 6,195,555 (hereinafter Dent). This rejection is respectfully traversed. Applicant respectfully submits that this rejection under 35 U.S.C. §103 does not follow the M.P.E.P. §706.02(j) which states:

“After indicating that the rejection is under 35 U.S.C. §103, the examiner should set forth in the Office Action: . . . (B) the difference or differences in the claim over the applied reference(s), (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (D) an explanation of why one

of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification . . . The teaching or suggestion to make the claimed combination and the reasonable expectation of the success must both be found in the prior art and not based on applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

As discussed in detail below, Applicant respectfully submits that there is no teaching or suggestion in Spear and Dent that their teachings may be combined so as to provide the present invention as recited in the claims and such motivation only comes from Applicant's disclosure. This approach constitutes impermissible hindsight and must be avoided. Spear teaches a method and system of generating neighbor cell lists in a cellular environment having a first cell and a plurality of neighbor cells (Abstract) in a conventional terrestrial cellular system as clearly shown in Figure 2 of Spear and described in the Detailed Description. In contrast, Dent teaches a method of directing a call to a mobile telephone in a dual mode cellular satellite communications network as clearly shown in Figure 1 of Dent and described in the Detailed Description. There is no teaching or suggestion in Dent of handoff between neighboring terrestrial cells as taught by Spear. Accordingly, a person of skill in the art would not be motivated to combine the teachings of Spear and Dent.

Additionally, neither Spear nor Dent show any recognition for the problem solved by the present invention as recited in the amended claims. The present invention involves a mobile communication device acquiring a new channel on a new communication system operating in a common geographical area with a current communication system to avoid a grey zone condition. A grey zone condition occurs when a mobile communication device is able to receive a page on a forward link (base station to mobile) from the current communication system, but a page response or a system access attempt on a reverse link (mobile to base station) fails because of insufficient transmit power in the mobile communication device that may be caused by a power control measure of the current communication system. The insufficient transmit power caused by the power control measure in the current system may permit interference from other mobile communication devices operating on the current communication system. Neither Spear nor Dent teach or suggest a grey zone condition or the solution as provided by the present invention. For all of these reasons, Applicant respectfully submits that a person of ordinary skill in the art would not be motivated to combine the teaching of Spear and Dent to provide the present invention as recited in the claims.

Even if it were proper to combine the teachings of Spear and Dent, they still would not provide the present invention as recited in the claims. Claim 1 has been amended to recite:

“adding the current channel to a grey zone channel list in a mobile communication device in response to the second quality indicator being below the predetermined threshold value to avoid a grey zone condition, wherein the grey zone condition includes the mobile communication device being able to receive a page on a forward link from the current communication system to the mobile communication device, but a page response or a system access attempt on a reverse link failing because of insufficient transmit power in the mobile communication device caused by a power control measure of the current communication system which permits interference from other mobile communication devices operating on the current communication system;

scanning any channels in a channel scan list in response to the second quality indicator being below the predetermined threshold value;

skipping any channels on the grey zone channel list during scanning to avoid the grey zone condition...”

Claim 1 has been amended to include the features of claims 3 and 6. Claims 3, 4, 6, 12, 19-21, 32, 34, 37 and 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent and further in view of Sawyer et al., U.S. Patent No. 5,915, 221 (hereinafter “Sawyer”). As previously discussed, there is no motivation to combine the teachings of Spear and Dent. Additionally, the Office Action in the rejection of claim 6 on page 14 of the Office Action admits that the combination of Spear and Dent fails to teach adding the channel to a grey zone channel list in a mobile communication device in response to the second quality indicator signal being below the predetermined threshold value to avoid a grey zone condition. Sawyer was cited for teaching a method and system for creating a neighbor list wherein an average interference level is measured and averaged for each channel and a ordered channel list of the most interference channels for which measurement results were received are determined and added to a neighbor cell list and that the list of the most interference channels created and shown in Figure 5 of Sawyer reads on a grey zone channel list (pages 14 and 15 of the Office Action). Applicant respectfully submits that Sawyer teaches that the neighbor cell list is the opposite of a grey zone channel list or teaches away from a grey zone channel list. The neighbor cell list includes a list of channel of neighboring cells to a particular cell to which a mobile communication device or station may be handed off for communications as opposed the grey zone channel list of the present invention, which includes channels that are skipped during scanning to acquire a new channel. Therefore, a call would not be

handed off to a channel on the grey zone channel list. In support of this, Sawyer in column 4, lines 9-12 recites:

“This neighbor cell list may be used during the process of handing off a call from the cell for which the list was created to one of its nearby neighbor cells. By using the neighbor cell list of the invention during handoff a more accurate and efficient handoff than is obtainable with a neighbor cell list created by existing methods can be obtained.”

Additionally, Sawyer in column 11, lines 54-63 recites:

“In order to create the neighbor cell list for any cell, a number (N) of the most interfered DCCH channels are determined from the table of FIG. 5. The N most interfered DCCH channels are the N channels having the N highest received signal strength.

Next, at step 632 a neighbor cells list is created. Continuing with the example of cell A, the N most interfered DCCH channels, if not already contained in the list, are added to the initial neighbor list containing the DCCH channels of cell B-cell G.” (emphasis added)

Accordingly, Sawyer teaches that the neighbor cell list includes DCCH channels with the highest received signal strengths that a call can be handed off to and not a list of channels that would be skipped or avoided for communications purposes as provided by the grey zone channel list of the present invention as recited in amended claim 1.

Additionally, neither Spear, Dent or Sawyer teach or suggest that the grey zone condition includes the mobile communication device being able to receive a page on a forward link but a page response or a system access attempt on a reverse link failing because of insufficient transmit power in the mobile communication device caused by a power control measure of the current communication system which permits interference from other mobile communication devices operating on the current communication system as recited in amended claim 1. For all of these reasons, Applicant respectfully submits that claims 1 is patentably distinguishable over Spear, Dent and Sawyer, whether considered individually or combined, and reconsideration and withdrawal of the 35 U.S.C. §103 rejection of claim 1 is respectfully requested.

With regard to the rejection of claims 2, 10, 11, 13 and 14, these claims recite additional features which further patentably distinguish over the cited documents. Additionally, these claims depend either directly or indirectly from independent claim 1, and by virtue of that dependency, contain all of the features of independent claim 1. Therefore, claims 2, 10, 11, 13 and 14 are also submitted to be patentably distinguishable over Spear, Dent and Sawyer. Reconsideration and

withdrawal of the 35 U.S.C. §103(a) rejection of claims 2, 10, 11, 13 and 14 is respectfully solicited.

Turning now to the rejection of independent claim 30 under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent, claim 30 had been amended to recite similar features to independent claim 1. Therefore, claim 30 is also submitted to be patentably distinguishable over Spear, Dent and Sawyer, for the same reasons as discussed with respect to claim 1. Reconsideration and withdrawal of the Section 103 rejection of claim 30 is, therefore, respectfully requested.

Regarding the rejection of claim 31 under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent, claim 31 depends directly from independent claim 30, and by virtue of that dependency, contains all of the features of independent claim 30. Therefore, claim 31 is also submitted to be patentably distinguishable over the cited documents, and reconsideration and withdrawal of the Section 103 rejection of claim 31 is also respectfully solicited.

Claims 16, 23, 24, 25, 27 and 36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent and further in view of Sawyer. This rejection is respectfully traversed. With respect to the rejection of independent claim 16 under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent and further in view of Sawyer, claim 16 has been amended to recite:

“scanning any channels on a channel scan list to acquire a new communication system different from the current communication system and operating in a common geographical area with the current communication system to avoid a grey zone condition in the current communication system in response to the second  $E_c/I_o$  of the CDMA pilot channel being below a grey zone threshold value for a predetermined time period.”

In contrast, Spear and Sawyer both teach handoff between cells in a single communication system operating in a geographical area and do not teach or suggest scanning any channel on a channel scan list to acquire a new communication system different from the current communication system and operating in a common geographical area with the current communication channel to avoid a grey zone condition in the current communication system as provided by the embodiment of the present invention as recited in amended claim 16. Dent teaches a method of directing a call to a mobile telephone in a dual mode cellular satellite communication network and also does not teach or suggest the features of the present invention as recited in amended claim 16 above. Accordingly, Applicant respectfully submits that independent claim 16 is patentably distinguishable over the cited

documents, and reconsideration and withdrawal of the 35 U.S.C. §103 rejection of claim 16 is respectfully requested.

Turning now the rejection of independent claim 23 under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent, and further in view of Sawyer, claim 23 has been amended to recite similar features to independent claim 1. Therefore, claim 23 is respectfully submitted to be patentably distinguishable over Spear, Dent and Sawyer for the same reasons as discussed with respect to independent claim 1. Reconsideration and withdrawal of the 35 U.S.C. §103 rejection of claim 23 is, therefore, respectfully solicited.

With respect to the rejection of claims 24, 25, and 27 under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent, and further in view of Sawyer, these claims recite additional features with further patentably distinguish over the cited documents. For example, claim 24 has been amended to recite:

“wherein the microprocessor is adapted to acquire another channel from the channel scan list in response to the other channel having an associated quality indicator greater than or equal to the predetermined threshold value, wherein the other channel is for a new communication system operating in a common geographical area with the current communication system.”

Applicant respectfully submits that there is no teaching or suggestion of acquiring another channel for a new communication system operating in a common geographical area with the current communication system as recited in claim 24. As previously discussed, Spear and Sawyer merely teach handoff between cells in a single communication system and Dent teaches directing a call in a cellular satellite communication network.

Additionally, claims 24, 25 and 27 depend either directly or indirectly from independent claim 23. Because of this dependency, these claims contain all of the features of independent claim 23. Therefore, claims 24, 25 and 27 are also submitted to be patentably distinguishable over Spear, Dent and Sawyer, and reconsideration and withdrawal of the Section 103 rejection of these claims is respectfully requested.

Regarding the rejection of independent claim 36 under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent, and further in view of Sawyer, claim 36 has been amended to recite:

“scanning any channels in a channel scan list in response to the second quality indicator being below the predetermined threshold value to acquire a new communication

system different from the current communication system and operating in a common geographical area with the current communication system to avoid a grey zone condition in the current communication system, wherein the grey zone condition includes the mobile communication device being able to receive a page on a forward link from the current communication system to the mobile communication device, but a page response or a system access attempt on a reverse link failing because of insufficient transmit power in the mobile communication device caused by a power control measure of the current communication system which permits interference from other mobile communication devices operating on the current communication system...”

As previously discussed, neither Spear, Dent or Sawyer teach or suggest acquiring a new communication system different from the current communication system and operating in a common geographical area with the current communication system to avoid a grey zone condition in the current communication system as recited in amended claim 36. Additionally, neither Spear, Dent or Sawyer teach or suggest a grey zone condition as recited in amended claim 36. Therefore, Applicant respectfully submits that independent claim 36 as amended is patentably distinguishable over Spear, Dent and Sawyer, whether considered individually or combined, and reconsideration and withdrawal of the 35 U.S.C. §103 rejection of claim 36 is respectfully solicited.

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent as applied to claim 1, and further in view of Labun et al., U.S. Patent No. 6,842,621 (hereinafter “Labun”). Claim 7 depends directly from independent claim 1. As a result of this dependency, claim 7 contains all of the features of independent claim 1. As previously discussed, claim 1 is patentable over Spear, Dent and Sawyer. Applicant respectfully submits that Labun adds nothing to the teachings of Spear, Dent and Sawyer so as to render independent claim 1 unpatentable. Therefore, claim 7 is submitted to be patentably distinguishable over the cited documents, and reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claim 7 is respectfully requested.

Claims 8, 9, 17, 22, 28 and 29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Spear, Dent and Sawyer, and further in view of Douthitt et al., U.S. Patent No. 5,524,280 (hereinafter “Douthitt”). This rejection is respectfully traversed. Claims 8 and 9 depend directly from independent claim 1, claims 17 and 22 depend directly from independent claim 16, and claims 28 and 29 depend directly from independent claim 23. Because of these dependencies, these claims contain all of the features of the referenced independent claims. Applicant respectfully submits that

Douthitt adds nothing to the teachings of Spear, Dent and Sawyer so as to render independent claims 1, 16 and 23 unpatentable. Therefore, claims 8, 9, 17, 22, 28 and 29 are submitted to be patentably distinguishable over Spear, Dent, Sawyer and Douthitt, and reconsideration and withdrawal of the Section 103 rejection of these claims is respectfully solicited.

Claims 3, 4, 6, 12, 19-21, 32, 34, 37 and 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over Spear, Dent and Sawyer. This rejection is respectfully traversed. Claims 4 and 12 depend directly from independent claim 1, claims 19-21 depend either directly or indirectly from independent claim 16, and claims 37 and 38 depend directly from independent claim 36. As a result of these dependencies, claims 4, 12, 19-21, 37 and 38 contain all of the features of the referenced independent claims. As previously discussed, independent claims 1, 16 and 36 are patentably distinguishable over Spear, Dent and Sawyer. Therefore, claims 4, 12, 19-21, 37 and 38 are also submitted to be patentably distinguishable over Spear, Dent and Sawyer, and reconsideration and withdrawal of the Section 103 rejection of these claims is respectfully requested.

Claim 15 was rejected under 35 U.S.C. §103(a) as being unpatentable over Spear and Dent, and further in view of Shah, U.S. Patent No. 6,047,071 (hereinafter "Shah"). This rejection is respectfully traversed. Claim 15 depends from independent claim 1, and as a result of this dependency, contains all of the features of claim 1. Applicant respectfully submits that Shah adds nothing to the teachings of Spear, Dent or Sawyer so as to render independent claim 1 unpatentable. Accordingly, claim 15 is also submitted to be patentably distinguishable over the cited documents, and reconsideration and withdrawal of the Section 103 rejection of claim 1 is respectfully solicited.



Conclusion

For the foregoing reasons, the Applicant respectfully submits that all of the claims in the present application are in condition for allowance. Reconsideration and withdrawal of the rejections and allowance of the claims at the earliest possible date are respectfully solicited.

If the Examiner has any questions about the present Amendment or anticipates finally rejecting any claim of the present application, a telephone interview is requested.

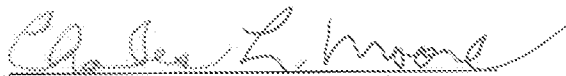
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 13-4365.

Respectfully submitted,

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